DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010300 Address: 333 Burma Road **Date Inspected:** 02-Nov-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Yu Dong Ping, Chen Ying Xin. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A

N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component:** Tower Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 11, South tower, Strut Plate.

SAW welding of weld joint SD1-STSA3-109M-1-6B; located on Bay 11, South tower. Welders are identified as 040772; ZPMC Quality Control Inspector (QC) is identified as Yu Dong Ping. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-4221-B-U3C-S-1.

Bay 11, West Tower, Interior Splice.

During random in process inspection this Caltrans Quality Assurance (QA) Inspector observed ZPMC performing weld repair of Surface Overlay on Interior Splice Plate WSD1-SA236 by Shielded Metal Arc Welding (SMAW) process. Upon asking for Weld Repair Report (WRR) ZPMC QC (CWI) "Yu Dong Ping" provided Weld Repair Report (WRR # T-WR2606) for 6mm of overlay repair by Flux Core Arc Welding (FCAW) process. This Caltrans Quality Assurance (QA) Inspector have written Incident Report on the same date.

Bay11, West Tower, Lift 4, Skin B, B/C Corner, Near 131M, Temporary Attachment Area.

During random visual inspection at Bay11, West Tower, Lift 4, Skin B (Temporary Attachment Area near Corner Seam B/C) this Caltrans Quality Assurance (QA) Inspector observed "Crack Like" indications at the removed Temporary attachment Weld area. The indications were shown to ZPMC and ABF QC Inspectors. No

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Incident Report has been written on this issue. The attached photographs provide additional detail.

Bay11, East Tower, Lift 4, Fit lugs.

FCAW welding of weld joint ESTL4-2K/L-94, 99, 100; located on Bay11, East Tower, Lift 4. Welders are identified as 048810; ZPMC Quality Control Inspector (QC) is identified as Zhan Bo. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-4333-TC-P4-F.

Bay10, North Tower, Lift 4, A/E Corner Seam.

FCAW welding of weld joint NSTL4-3B/L-3B; located on Bay10, North Tower, Lift 4. Welders are identified as 053869; ZPMC Quality Control Inspector (QC) is identified as Liu Zhong An. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4B-F.

Bay 11, East tower, Corner Angle Splice.

SMAW welding of weld joint ED1-SA3-18-89M-5-1A; located on Bay 11, East tower. Welders are identified as 053049; ZPMC Quality Control Inspector (QC) is identified as Chen Ying Xin. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-3211-TC-U5B-1.

This QA Inspector carried out NDE on following

Bay 11, West Tower, Tower Strut Plate.

This QA inspector performs Random Ultrasonic Testing (UT) of approximately 10% area previously tested and accepted by ZPMC Quality Control personnel, FOR GREEN TAG. This QA Inspector generated an UT report(TL-6027) for this date. The members are identified as

- 1) WD1-STSA3-2-109M-1-1A, 2B, 4A, 6B.
- 2) WD1-STSA3-2-109M-2-1A, 2B, 4A, 6B.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer